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CHARTING THE COURSE: NORTH CAROLINA'S PROGRESS TOWARDS THE HEALTHY CAROLINIANS 2000 OBJECTIVES

By Kathryn P. Blue

Abstract

In 1991 North Carolina formed a task force to develop objectives to improve the health status of the citizens of the state. *Healthy Carolinians 2000: The Report of the Governor's Task Force on Health Objectives for the Year 2000* was based on the Federal report *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. The Task Force set objectives, goals, and special targets in 11 categories designed to allow tracking of changes over time.

The State Center for Health and Environmental Statistics was designated as the organization that would monitor the objectives. This is the first report on trends in the Healthy Carolinians 2000 objectives, which also includes information on some activities of county Healthy Carolinians Task Forces. It is hoped that as local task forces implement their strategies, their combined efforts will improve the state's health status indicators.

Improvements have been seen in several areas of health status since the publication of the Healthy Carolinians report, and it appears likely that goals for at least six indicators can be achieved by the year 2000 if present trends continue. Many indicators, however, have shown no improvement, and some have, in fact, worsened since the adoption of the Healthy Carolinians goals late in 1992.



Introduction

Americans are goal-oriented people. As Edmund Burke said, "There is nothing in the world really beneficial that does not lie within the reach of an informed understanding and a well-directed pursuit." In order to take advantage of the concept of managing by setting objectives, the U.S. Department of Health and Human Services created a collection of goals and objectives, published in its report, *Healthy People 2000*.¹ These national goals were designed to be measurable and achievable. States were encouraged to create their own set of objectives that would realistically represent achievable health goals for their people.

In 1991, Governor James G. Martin created the Governor's Task Force on Health Objectives for the Year 2000. Funded by the Kate B. Reynolds Health Care Trust, this state-level task force was formed to develop goals and objectives that, if achieved, would improve the health status of North Carolinians. These objectives were designed to: increase the span of healthy life; reduce health disparities among the disadvantaged; and emphasize preventive health services and healthy lifestyles.

The task force, chaired by Dr. William G. Anlyan, Chancellor Emeritus of Duke University, developed health objectives for each of 11 health concerns. The health areas for which objectives were set are: injury; maternal and infant health; immunizations; dental decay; physical fitness; nutrition; sexually transmitted diseases; substance abuse and tobacco use; mental health; chronic diseases; and environmental pollution. Baselines were set (most for the year 1990) and targets developed for the year 2000. In this report, these objectives are also referred to as "Healthy Carolinians 2000" objectives. The task force published the set of goals in late 1992 in a report titled *Healthy Carolinians 2000: The Report of the Governor's Task Force on Health Objectives for the Year 2000*.²

The task force recommended that a few pilot counties could test out the best way to involve their citizens in developing a local task force. Six pilot counties were selected to work toward developing strategies specific to their populations. In addition to providing local solutions, this approach fosters public/private partnerships among community agencies, businesses, religious organizations, and citizens who have an interest in certain problem areas. North Carolina is thus far the only state to systematically encourage county groups to adopt county-level health goals based upon the Healthy People 2000 model.

Now, two years later, five local Healthy Carolinians 2000 Task Forces have been certified and more than half of North Carolina counties are involved in Healthy Carolinians 2000 activities at some level. See Appendix A for a map of counties involved in Healthy Carolinians. A state-level office to coordinate Healthy Carolinians 2000 activities was also established.

The State Center for Health and Environmental Statistics has been designated to monitor progress toward the Healthy Carolinians 2000 objectives. This study will discuss the trends that have begun in the two years since *The Report of the Governor's Task Force on Health Objectives for the Year 2000* was published late in 1992. Examples of county task forces who are working on specified objectives are primarily the five certified local Healthy Carolinians 2000 task forces (see Appendix B) and applicants for certification for 1994.

One criterion that was established prior to the creation of goals and objectives was that they must be data-driven. Goals would only be set for those areas for which baseline data were available. Some of the baseline data in the original report were derived through synthetic estimates or through surveys, many of which will not be repeated prior to the Year 2000. All data elements with regular surveillance systems have been updated. County data are not shown in this report; however, SCHES will gladly provide county-level data if available.

All objectives set by the Governor's Task Force are based on unadjusted rates. That is, none of the rates have been changed to account for differences between North Carolina and the United States in the composition of race, sex, or age distribution.

Injury Control

The Healthy Carolinians 2000 goal developed in the area of injury control is to "Reduce overall injury mortality by 15 percent."² Special targets identified were motor vehicle deaths among persons aged 15-24 and homicides among nonwhite males. A 25 percent reduction was sought for both special targets by the year 2000. Due to the small numbers involved, 3-year death rates were used as the baselines for injury objectives. Table 1 shows the trends since the 1988-90 baselines.

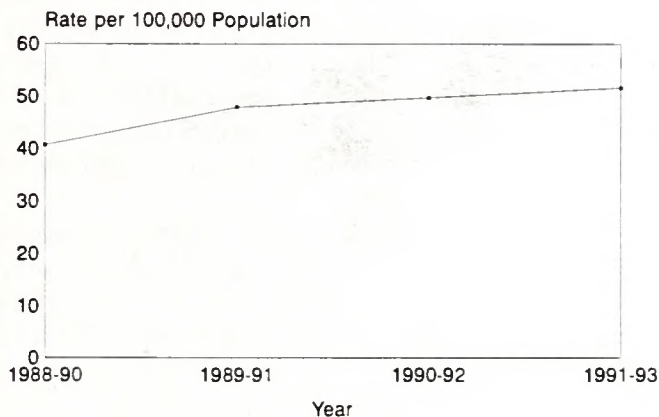
Table 1
Injury Control Objectives

	1988-90 N.C. Rate	1989-91 N.C. Rate	1990-92 N.C. Rate	1991-93 N.C. Rate	Year 2000 Goal
Injury Death Rate	71.0	69.9	67.1	66.0	61.4
Motor Vehicle Death					
Rate among Ages 15-24	39.4	36.8	33.8	33.6	29.6
Nonwhite Male Homicide Rate	40.7	47.9	49.7	51.6	29.5

Source: State Center for Health and Environmental Statistics

Both the overall injury death rates and motor vehicle injury death rates have declined since the 1988-90 baselines were set. Homicide rates among nonwhites have continued their upward trend. The North Carolina rate has increased about 27 percent over the past three years. See Figure 1.

Figure 1
Nonwhite Male Homicide Rates
North Carolina, 1988-90 - 1991-93



To reduce their motor vehicle injury deaths, the Columbus County Healthy Carolinians 2000 Task Force chose to establish a network between the agencies in their county that deal with seat belt usage, car seat loaners, and substance abuse prevention. This network will share information and conduct public information campaigns.

Wake County also chose to look at violence and injuries. Their task force is planning to work with agencies who are providing services to involve minorities in the planning and delivery of the programs to insure their appropriateness and effectiveness. One strategy planned is to increase nonviolent conflict resolution skills through providing programs at housing communities and at local agencies.

Maternal and Infant Health

Historically, North Carolina's infant mortality rates have been among the worst in the nation.³ In 1991, the percentage of North Carolina's births that were low-weight (infants who weighed five-and-a-half pounds or less at birth) exceeded that of the nation by about 14%.⁴ One factor associated with poor birth outcomes is lack of prenatal care. In 1992, one-quarter of North Carolina's births were to women who began their care after the first three months or had fewer prenatal visits than recommended.⁵

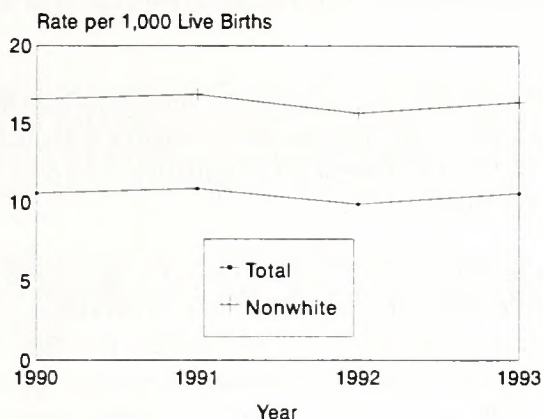
In order to improve the health status of infants and pregnant women, the Governor's Task Force on Health Objectives for the Year 2000 set two overall objectives and two special target objectives. The overall objectives were to reduce the total infant mortality rate by 30% and to reduce the nonwhite infant mortality rate by 40%. The rationale for a larger percent decrease for nonwhites was to decrease the racial disparity between white and nonwhite infant deaths. In 1993, the nonwhite infant mortality rate was more than twice the white rate (16.4 and 7.9, respectively).⁶ The two special objectives were to reduce low weight births and to reduce pregnancies among women ages 17 and younger.

Table 2
Maternal and Infant Health Objectives

	1990 N.C. Rate	1991 N.C. Rate	1992 N.C. Rate	1993 N.C. Rate	Year 2000 Goal
Infant Deaths *					
Total	10.6	10.9	9.9	10.6	7.4
Nonwhite	16.6	16.9	15.7	16.4	8.7
Percent Low Birthweight*					
Total	8.0	8.4	8.4	8.7	7.0
Nonwhite	12.4	12.7	12.8	13.0	10.4
Teen Pregnancies❖					
Total	72.0	70.9	67.4	62.4	63.0
Nonwhite	107.8	109.6	107.8	110.7	86.7
<p>* Deaths to infants less than one year of age, per 1,000 live births. ♦ Births weighing 5 pounds, 8 ounces or less. ❖ Teen pregnancies for girls ages 15-17 per 1,000 girls in age group.</p>					
Source: State Center for Health and Environmental Statistics					

Although North Carolina's infant mortality rates have shown a general downward pattern over the years, they have fluctuated sharply in the past three years. The rate increased in 1991, declined to the lowest level in history in 1992, and increased again in 1993. The nonwhite rate follows the same trend as the total rate.⁶ See Figure 2.

Figure 2
Infant Mortality Rates
Total and Nonwhite
North Carolina, 1990-1993



The low birthweight rate increased in 1991 and again in 1993. The rise in the low birthweight rate is opposite of the hoped-for trend to the year 2000. The percentage of births which were low-weight consistently fell at or below eight percent during the 1980s; however, the 1990s has seen a higher percentage of low-weight births in North Carolina.⁶

The Year 2000 goal for reducing teen pregnancies among all girls ages 15-17 was achieved in 1993, dropping from 72.0 pregnancies per 1,000 women in 1990, to 62.4 in 1993, a reduction of 13 percent.⁵ While the pregnancy rate among all women aged 15-17 has improved, the rate among nonwhite adolescents has gotten slightly worse, indicating a need to target services to minority youth. The Task Force included among its general strategies the need to increase access and utilization of pregnancy prevention services, stress male responsibility, and increase school and community involvement.²

Beginning in 1990, the state appropriated grant funds to assist local agencies in preventing teen pregnancies. Thirty-five projects are in various stages, of which 30 have produced outcome data, according to the Adolescent Pregnancy Prevention Program. The projects that have produced data have shown positive results from programs featuring: Family Life Education, counseling and referral, and pregnant and parenting teen projects (which seek to reduce subsequent pregnancies). Several other types of programs have not been shown to be effective or are in a stage too early to measure.⁷

The New Hanover County Year 2000 Health Objectives Committee is working on several maternal and infant health projects. One is an incentives program that will reward women for keeping their prenatal care appointments. Women are credited a certain dollar value for keeping their appointments; when the baby is delivered they can use their "baby bucks" toward baby items.

In Stanly County, the Healthy Stanly Countians 2000 Task Force has been working to involve churches, social groups, and employers in expanding community education about infant mortality and prenatal care. One of their strategies is to work with employers to make it easier for women to get prenatal care. Identified barriers to prenatal care for working women include inadequate insurance and lack of paid leave.

Immunization

The primary goal for immunization was to increase immunization levels for people at higher risk for exposure to disease. Three special targets were set: children under two; children in day care and kindergarten; and the elderly and chronically ill.

Immunization is an area that has received a great deal of attention since the goals were set two years ago. The state has begun work on a state-wide immunization initiative designed to assure that all children are immunized age-appropriately. One component of this initiative is the provision of free vaccines to children, regardless of the source of health care.

Although data on the immunization status of children under the age of two are not available at this time, the Department of Environment, Health, and Natural Resources is developing a statewide immunization registry which should yield these data in the future. In lieu of a registry, the state Immunization Program has done periodic follow-back studies to determine the immunization status of children at age two. The percentage of children meeting the requirements at kindergarten entry very nearly reaches the goal in 1992. It seems likely that the goal of age-appropriate immunizations will be reached by the Year 2000.

The two immunization measures with surveillance systems in place are the completion of immunization by entry into day care or kindergarten. Table 3 shows percentage of completion of required immunization at entry to licensed day care centers and kindergartens from throughout North Carolina. The completeness of Kindergarten immunization has steadily increased since 1990. Although it appears that day care immunization levels dropped sharply from 1990 to 1991, the baseline for 1990 was an overestimate. State immunization staff now estimate that in 1990, approximately 85 percent of children were up-to-date on their immunizations at entry to day care.

Table 3
Immunization Objectives

	1990 N.C. %	1991 N.C.%	1992 N.C.%	Year 2000 Goal
Basic Series Completed at Entry to:				
Licensed Day Care	93.0	83.9	88.0	98
Kindergarten	95.0	96.8	97.8	98
Source: Division of Epidemiology				

At this time the state does not collect data on the extent to which flu shots are administered. Flu shots have been widely promoted at local health departments, work sites, nutrition sites, and senior centers in recent years, so their use has increased as a general rule.

Columbus County states that one of their goals is to increase immunization levels, especially among young children, persons at risk for communicable diseases, and older persons. They plan to increase immunization clinic hours at the health department, sponsor an intensive immunization awareness campaign, and provide incentives for immunizations.

Dental Health

The primary dental objective is to increase the percentage of children and youth whose permanent teeth are decay-free. Special targets were set for disadvantaged children at high risk for dental disease and children who are in need of dental sealants.

Unfortunately, there are no data available to plot trends since the 1986 baseline. According to the Division of Dental Health, dental data are difficult and expensive to obtain. Dentists collecting dental data require extensive training so that all procedures are comparable and provide the same types of results. In the meantime, an on-going survey should provide some data in 1995 with which to set another point in the trend line.

Despite the scarcity of state-level data, county-level data may be easier to obtain. The state's Division of Dental Health has volunteered its regional dentists to assist counties in gathering baseline and periodic data, if they choose to target dental problems.

Physical Fitness

It has long been accepted that people who are fit and active have reduced risk from chronic diseases. One primary goal for physical fitness was set by the Governor's Task Force - to increase the level of fitness among all North Carolinians. Special targets were set for school children, adults ages 18+, and older adults (adults 65 years old and older).

As shown in Table 4, only adults 65 and older showed any improvement.

Table 4
Physical Fitness Objectives

	1990 N.C. Rate	1991 N.C. Rate	1992 N.C. Rate	Year 2000 Goal
Adults Who Exercise (Ages 18+)	40.6	39.0	39.6	50.0
Active Older Adults (Ages 65+)	31.3	33.5	34.1	40.0

Source: Behavioral Risk Factor Surveillance System, Division of Adult Health Promotion

The baseline physical fitness data on children shown in the Governor's Task Force Report were collected by the North Carolina Health and Fitness Council in 1992. The survey will be conducted again in 1996 and 2000.⁸

For those county task forces interested in addressing this objective, one source of fitness data on children is

the county school system. Many school systems conduct physical fitness testing and the results could be available to community task forces if the school has computerized the data. In one county, Madison County's Community Health Consortium, took just such an approach by supporting its school system in the implementation of a new computerized system of physical fitness scoring, "Physical Best." The consortium's physical fitness subcommittee will serve as volunteers to assist in pre- and post-testing. They are also seeking funds to give each student a certificate of participation.

Nutrition

Although nutrition has many aspects, overweight is the only one addressed by the Healthy Carolinians 2000 report. The sparseness of nutrition data for the entire population is the major roadblock to setting broad nutrition goals. Certain populations for which there are nutrition programs, such as Special Supplemental Food Program for Women, Infants and Children (WIC), have a considerable volume of data. It is hoped that in the future, Healthy Carolinians 2000 Task Forces will have more measures from which to choose.

Surveys conducted by three state agencies ask questions concerning whether the person questioned is overweight. The Behavioral Risk Factor Survey targets people ages 18 and older. The Pediatric Nutrition Surveillance System weighs and measures infants and young children to establish whether they are over- or under-weight. The Youth Risk Behavior Survey is administered to 9th and 12th graders.

Table 5 shows trends in the percentage of people indicating they are overweight, from the Behavioral Risk Factor Survey,^{9,10} the Pediatric Nutrition Surveillance System¹¹ and the Youth Risk Behavior Survey.¹² These surveys show limited, if any, improvement in the proportion of respondents who are overweight.

Table 5
Nutrition Objectives

	1990 N.C. %	1991 N.C. %	1992 N.C. %	Year 2000 Goal
Overweight				
Low-income children 0-4♦	7.0	7.1	7.1	5.0
Low-income children 5-11♦	16.0	20.2	17.1	10.0
Persons 12-19‡	37.0	n.a.	40.0	15.0
Adults ages 20-64■	30.0	27.5	28.4	20.0
Adults ages 65+■	30.0	31.4	36.2	20.0
Nonwhite Females ages 25+■	46.0	35.8	46.6	23.0
Sources: ♦Pediatric Nutrition Surveillance System, Division of Maternal and Child Health ‡Youth Risk Behavior Survey, Department of Public Instruction ■Behavioral Risk Factor Surveillance System, Division of Adult Health Promotion				

The U.S. Department of Health and Human Services has several national surveys that seek to learn eating habits of Americans. The Health and Nutrition Examination Survey (HANES) not only asks questions about the eating habits of its respondents, but also takes weight and height measurements. These independent measurements allow HANES staff to determine objectively whether the people interviewed are overweight, rather than allowing the respondent to state whether he/she is overweight. Such a survey would be of benefit in examining overweight and other nutrition-related issues.

Dietary recall surveys are the best way to find out what foods people have recently eaten and which foods they prefer. Because they rely upon people to either recall at a later date or keep a record of the foods they eat at the time they are eaten, these surveys are likely to be unreliable. Often people who do not eat healthy foods report what they know nutritionists would like to hear. While these surveys are not always accurate, quite often this is the only way to gather data on eating habits.

Nutrition was selected as one of the Richmond County Healthy Carolinians 2000 areas of interest. One of their strategies was to incorporate nutrition education into their school health education program. Adults would be provided education on preparation of healthy low-cost meals. The Watauga County Healthy Carolinians 2000 Task Force plans to collect baseline data on overweight adolescents in their county and track it over time. These data should be useful in determining if their interventions are working.

Sexually Transmitted Diseases

HIV infection and sexually transmitted diseases (STDs) are serious problems in North Carolina. In 1992, our gonorrhea rate was fourth highest in the nation at 385.3 cases per 100,000 population -- 96 percent higher than the national average, and about 84 times the rate of the lowest state, Vermont (4.6 per 100,000).¹³ For this reason, the Governor's Task Force on Health Objectives for the Year 2000 selected two primary goals concerning sexually transmitted diseases. One is a general goal of reducing sexually transmitted diseases. The other goal is to identify and provide treatment to a higher proportion of those persons infected with HIV. Special targets are people ages 15-24, people with syphilis, and screening for people receiving treatment for STDs and for intravenous (IV) drug users.

Table 6
Sexually Transmitted Disease Objectives

<u>Cases of Sexually Transmitted Diseases</u>				
	1991 N.C. Cases	1992 N.C. Cases	1993 N.C. Cases	Year 2000 Goal
Syphilis, gonorrhea, and chlamydia cases				
Total, ages 15-24	34,240	29,290	28,407	23,968
Nonwhite, ages 15-24	20,039	23,818	22,721	14,520
<u>Rates of Sexually Transmitted Diseases (per 100,000)</u>				
	1991 N.C. Rate	1992 N.C. Rate	1993 N.C. Rate	Year 2000 Goal
Syphilis Case Rate				
Total	31.8	36.2	27.8	10.0
Nonwhite	113.3	137.2	104.6	34.2
<u>Percentages of Patients</u>				
	1991 Percent	1992 Percent	1993 Percent	Year 2000 Goal
Percent of STD Clinic Patients Screened for HIV Infection	40	33	52	90
Source: Division of Epidemiology				

Table 6 shows a reduction in the total number of cases of syphilis, gonorrhea, and chlamydia among young people ages 15-24 from 1991-1993. However, the number of cases among nonwhites ages 15-24 rose by almost 4,000 cases from 1991 to 1992; decreased somewhat from 1992 to 1993, but still remained higher than in 1991. Primary and secondary syphilis case rates have declined since the baseline was set.

HIV screening has increased in local health department STD clinics. All county public health departments provide confidential or anonymous testing for HIV infection. Data were not available from mental health programs on the number of IV drug patients who were tested for HIV.

The Healthy Wake County 2000 Task Force has set two goals to reduce sexually transmitted diseases in Wake County. The first is to increase the knowledge and awareness of HIV and sexually transmitted infections and its impact on the community. The second goal is to increase the quality and capacity for HIV and sexually transmitted disease care in Wake County.

Substance Abuse

The abuse of tobacco, alcohol, and other drugs results in many deaths each year from causes such as lung cancer, heart disease, alcohol-related motor vehicle injuries, emphysema, unintentional drug overdoses, oral cancer, and chronic liver disease. Most of the baselines set by the Governor's Task Force were for adolescent use of tobacco and alcohol, and abuse of drugs. This age group is of special interest because studies suggest that 60 percent of smokers begin smoking by age 14 and 90 percent of people who will smoke have begun by age 20.¹³ In addition, cigarette smoking is viewed as a "gateway" drug. Studies have indicated that virtually all drug users indicated that they had previously used tobacco, alcohol, or both.¹⁴

The objective established for substance abuse was to reduce the use of tobacco and the inappropriate use of alcohol and other drugs. Special targets were: reduction of regular smokers ages 15-20; reduction of male smokeless tobacco users ages 12-24; reduction of adolescents ages 10-18 who have used illicit drugs in the past month; reduction of people under age 21 who have used alcohol in the past month; and reduction of the number of people age 20 and older who have binged on alcohol in the past month.

Table 7
Substance Abuse Objectives

	1990 N.C. %	1991 N.C. %	1993 N.C. %	Year 2000 Goal
Daily Smokers- Grades 11-12	10	n.a.	21.0	9
Smokeless Tobacco Use in Past 30 Days - Grades 11-12	7	n.a.	11.7	4
Marijuana Use in Past 30 Days- Grades 11-12	16	n.a.	15.0	8
Have Drunk Beer in Past 30 Days- Grades 11-12	35	n.a.	44.0	17
Binge Drinkers - Ages 20+❖	9	7.6	8.4*	2
* 1992 data.				
NOTE: Smokeless tobacco use was listed as daily smokeless tobacco use in the Healthy Carolinians report. This should have been shown as smokeless tobacco use in the past 30 days.				
Source: Youth Risk Behavior Survey, Department of Public Instruction				
❖Behavioral Risk Factor Surveillance System, Division of Adult Health Promotion				

Table 7 shows data relevant to the special targets. The major highlights are:

- While reported marijuana use in the past month was down, alcohol use by adolescents jumped sharply, rising from 35% to 44%. Similar results have been seen in other studies.¹⁵
- Both cigarette use and smokeless tobacco use have increased considerably among high school seniors since the baselines were set. Daily cigarette use more than doubled and smokeless tobacco use increased by 67 percent.¹⁶

Many of the community Healthy Carolinians 2000 Task Forces have selected substance abuse objectives, but most have had a difficult time finding local data. This underscores the problems encountered when trying to take state objectives to the local level. Despite the need for quantifiable data with which to plan interventions, accurate data on alcohol and substance abuse is difficult to obtain. People are reluctant to answer questions candidly concerning areas of their personal life, especially those with social stigma attached. Therefore, data on substance abuse are scant.

Two counties that have been working on substance abuse prevention are Surry and Madison. The Madison Community Health Consortium has encouraged the Board of Education to create "smoke-free" buildings. The principals and Board of Education members were given certificates of appreciation for acting to eliminate tobacco in the Madison County schools. Madison has also targeted pregnant women to receive prenatal classes to help them quit smoking. In Surry County, all high school students will receive pocket cards with a listing of local substance abuse services. These cards were an inexpensive way to put information at the fingertips of all high school students in Surry County.

Mental Health

In this area, the Governor's Task Force used three social manifestations or indicators of mental health as proxies for actual mental health prevalence. These were the reduction of suicides, the reduction of domestic and sexual assault, and an increase in the proportion of families identified at risk who received early intervention services. Two special targets were identified: young people showing signs of depression and families with histories of violence, stress, marital problems, or alcohol or drug abuse.*

As shown in Table 8, the suicide rate declined in 1993, but reports of violence in the home have increased from the 1990 baseline. Domestic assaults increased by 45%; child abuse and maltreatment increased by over 31%; and child sexual abuse increased by about three percent. These data for violence are based on substantiated reports of abuse, rather than the total number of reports.¹⁷ The Child Protective Services Section of the Department of Human Resources advises that the number of substantiated cases is probably low. While the total number of reports of child abuse may be more reflective of the actual number of cases, it was decided that a conservative estimate (substantiated reports) was preferable to one that may be inflated. Domestic violence reports have increased as the number of shelters for battered women increase.

* When the data were compiled for this study, it became clear that there was an error in the number of substantiated cases of child sexual abuse printed in *The Report of the Governor's Task Force on Health Objectives for the Year 2000*. The number of substantiated cases of child sexual abuse for 1990 was not 17,177 as stated, but rather 1,405. Since our baseline was based on incorrect data, the Year 2000 objective was changed to 1,365, to reflect the correct number of cases.

Table 8
Mental Health Objectives

	1988-90 N.C. Rate	1989-91 N.C. Rate	1990-92 N.C. Rate	1991-93 N.C. Rate	Year 2000 Goal
Suicide Rates+	13.1	13.2	13.0	12.3	10.6
	1990 N.C. Cases	1991 N.C. Cases	1992 N.C. Cases	1993 N.C. Cases	Year 2000 Goal
Domestic Assaults❖	17,992	17,399	20,006	26,118	16,193
Child Abuse and Maltreatment■	24,749	25,078	32,011	30,338	22,274
Child Sexual Abuse■	1,405	1,203	1,500	1,447	1,365
NOTE: Child Sexual Abuse baseline and goal for 2000 have changed. The second printing of the Healthy Carolinians report has been revised to show correct numbers.					
Source: +State Center for Health and Environmental Statistics					
❖Council on Women, Department of Administration					
■Division of Social Services, Department of Human Resources					

Local coalitions may find that their county Department of Social Services has a wealth of information on the cases of child abuse, mistreatment, and neglect. County social service agencies may have other useful information about battered wives, the homeless, and other populations that have a higher risk of violence. In addition, local task forces will find that their county mental health agencies also collect data on the people who receive treatment at their facilities. While these data do not include all people who receive care for mental problems, it can be helpful in determining the extent to which mental health problems exist in a county.

Chronic Diseases

The Governor's Task Force decided to focus upon five major chronic diseases: heart disease; stroke; chronic lung disease (chronic obstructive pulmonary disease); cancer; and diabetes. Primary goals were established with reductions that mirrored the Federal Healthy People 2000 reductions. Heart disease, stroke, and lung disease death rates are targeted for a 25 percent reduction. Diabetes death rates are to be reduced by 10 percent, while cancer is targeted for only a five percent reduction, due to the fact that cancer rates have been rising.

Each of the five diseases identified have specific targets associated with them. Heart disease reductions are aimed at nonwhite males, white males, nonwhite females, and postmenopausal women who are overweight, sedentary, or hypertensive. Stroke reductions identified nonwhites, overweight people, and those with uncontrolled hypertension. Cancer targets are nonwhites, smokers, and people with high-fat diets. Lung disease reductions target nonwhites, smokers, and those who were exposed to air pollutants. Diabetes reductions are aimed at nonwhites, overweight persons, and those with hypertension.

Table 9
Chronic Disease Objectives

	1988-90 N.C. Rate	1989-91 N.C. Rate	1990-92 N.C. Rate	1991-93 N.C. Rate	Year 2000 Goal
All Five Diseases (totaled)	607.4	601.2	600.3	607.7	561.8
Heart Disease	288.8	282.7	278.9	278.4	248.9
Stroke	70.2	68.4	67.3	68.0	62.4
Cancer	197.2	198.0	200.1	203.1	204.7
Lung Disease	30.8	31.3	33.2	36.5	25.5
Diabetes	20.4	20.8	20.8	21.7	20.3

Source: State Center for Health and Environmental Statistics

Table 9 shows that the death rate for heart disease declined over the period. Stroke death rates remained stable. Cancer, lung disease, and diabetes death rates all increased slightly. Although it appears that we have achieved our goal for cancer, rates for these diseases are actually increasing, so that if the growth rate is unchecked, we will not achieve our goal for the Year 2000.

Chowan Healthy Carolinians 2000 Task Force selected smoking cessation and worksite wellness as a means of reducing premature mortality from chronic diseases. Businesses in Chowan County will be opening their worksites to allow education, smoking cessation classes, and screenings for their employees. The Chowan Healthy Carolinians 2000 Task Force also plans to hold health fairs to provide screenings and information to the citizens.

Wilkes County's Community Health Council plans to work with businesses in the county to decrease the risk factors for chronic disease. One method identified is to use work sites as both a place of education and screening. Employees of county government and the five largest employers in Wilkes County will be provided information to assist them in making healthy lifestyle choices. Annual health screenings of these employees will provide the county with trackable data on prevalence of risk factors, as well as the employees' knowledge and attitudes about risk factors. In addition, they plan to work with the Southern Appalachian Leadership Initiative on Cancer (SALIC) to help examine the effectiveness of programs aimed at the reduction of specific cancers.

Environment

Feeling strongly that environmental protection was an important piece to the health status picture, the Governor's Task Force identified three goals to monitor environmental protection: to prevent and correct contaminated wells; to identify and treat children with high blood lead levels; and to reduce solid waste. Goals were also set for well ordinances and septic tank screenings, but numbers are not yet available for these measures. Special attention needs to be paid to collecting more county-level environmental data, because citizens are concerned with their environmental status and how it influences their health.

Table 10 lists baselines and trends for environmental indicators.

Table 10
Environmental Objectives

	1990 N.C. %	1991 N.C. %	1992 N.C. %	1993 N.C. %	Year 2000 Goal
Percentage of Preschool Children Screened for Lead Levels*	4.1	4.7	5.6	9.6	75
	Fiscal Year 1991	Fiscal Year 1992	Fiscal Year 1993		Year 2000 Goal
Tons of Municipal Solid Waste❖	7.1 million	6.8million	6.8million		4.2 million
Source: *Division of Environmental Health ❖Division of Solid Waste Management					

Conclusions

The goals and objectives set for the state by the Governor's Task Force on Health Objectives for the Year 2000 have had the effect of helping citizens of North Carolina focus on the task ahead. While not all the original indicators have proved to be trackable, a large percentage of the indicators have been tracked.

Comparing the most recent year's data to the baseline reveals that only one of the Healthy Carolinians 2000 objectives has been achieved; the teen pregnancy rate for all women ages 15-17 has dropped below the goal. In addition, one objective has advanced three-fourths of the way to the goal: percent completion of the basic series of immunizations before Kindergarten entrance.

On three of the objectives we are more than half way to our goal, but less than three-fourths. These are: the injury death rate; motor vehicle injury death rate among people aged 15-24; and sexually transmitted diseases among all people ages 15-24.

Many of the measures used in Healthy Carolinians objectives have shown minor improvements. We are still less than halfway to our goal in the following areas:

- infant death rate among minorities;
- immunization completion at entrance to day care;
- overweight persons 20-64;
- active older adults;
- syphilis case rate;
- the percent of STD clinic clients screened for HIV;
- 12th grade marijuana use;
- binge drinking among persons over age 20;
- suicide death rate;
- heart disease death rate;

stroke death rate;
percentage of children screened for blood lead levels; and
solid waste production.

Indicators which have shown no improvement or are worsening are:

total infant mortality;
nonwhite male homicide rate;
percent low weight births;
nonwhite teen pregnancy rate for ages 15-17;
percentage of adults who exercise (ages 18-64);
overweight among low-income children ages 0-4 and 5-11;
overweight among people ages 12-19;
overweight among older adults and nonwhite women age 25 and older;
nonwhite syphilis, gonorrhea, and chlamydia cases among ages 15-24;
12th grade tobacco use;
12th grade alcohol use;
domestic violence and sexual assault;
and cancer, lung disease, and diabetes mortality.

As a result of the Healthy Carolinians 2000 project, several changes have been made in programs and policies. The Department of Environment, Health, and Natural Resources consolidated its lead screening program, located in the Division of Maternal and Child Health and its lead abatement program, located in Environmental Health. With these two programs united, all problems associated with lead can be dealt with by one program rather than relying upon referrals. The statewide immunization registry was also envisioned as a way to ensure that each child is tracked and immunized at the proper intervals. The Office of Healthy Carolinians 2000 was established to assist local coalitions in working to achieve the year 2000 goals.

Going back to Sir Edmund Burke's quote at the beginning of this study, the data presented in this report have hopefully given a clearer picture of the state's health status and trends, so that the reader will have an informed understanding of the state's health status picture. The well-directed pursuit of goals must come from local coalitions, not primarily by the state. Communities know what strategies will work best for them. Health strategies can be successful only when citizens take charge of their own health problems and forge new solutions.

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North Carolina Department of Environment, Health and Natural Resources



Appendix B

Certified Local Healthy Carolinians Task Forces

The following task force information is based upon a survey of goals and activities conducted in July 1994. As with any survey, the data received vary in the amount of detail. A contact person is provided so that the individual task forces can answer questions. Contact Sarah Ahmad at the Healthy Carolinians Office, (919) 715-4173, for more information.

Madison Community Health Consortium

C/O Hot Springs Health Program

P.O. Box 909

Mars Hill, N.C. 28754

Chair: June Trevor (704) 687-3491

Formed July 1989 as advisory board to Madison Community Health Project, funded by W.K. Kellogg Foundation.

Certified as a Healthy Carolinians 2000 Task Force, November 1993.

Committees:

Physical Fitness Task Force

Targets:

- Increase by 20% school children's performance on Physical Best fitness tests.
- Increase to 50% the proportion of adults, ages 19-64, who perform at least 20 minutes of continuous exercise 3 times a week.
- Increase to at least 40% the proportion of older adults (65 and older) who perform at least 20 minutes of continuous exercise 3 times a week.

Activities:

- Establish a Madison Fitness Council which will accomplish the following activities:
- Support the school system in implementation of the Physical Best program that involves computerized scoring of children on fitness tests in several categories. Council will serve as volunteers for pre-/post-testing and seek funds for student certificates of participation.
- Promote worksite fitness activities.
- Sponsor regular "after work" group walks on existing fitness trails.
- Seek funds to develop new fitness trails that are accessible and level in mountainous county.

Substance Abuse Task Force

Targets:

- Reduce the percentage of adolescents who use smokeless tobacco from 11.9% to 7% by the year 2000.
- Reduce the percentage of Health Department prenatal patients who smoke from 51% to 30% by the year 2000.

Activities:

- School/Community Team Training implementation action plan.
- Certificates for public school principals and Board of Education for establishing tobacco-free buildings.

Watauga County Healthy Carolinians 2000 Task Force

C/O Appalachian District Health Department

Route 5 Box 199

Boone, N.C. 28607

Chair: Margaret Watkins (704) 264-4995 Fax (704) 264-4997

Committees:

Injury Control

Activities:

- Coordinate with the Governor's Highway Safety Committee to begin local coalition.

Maternal and Infant Health

Activities:

- Work with PPOP grants and increase immunizations.

Nutrition

Activities:

- Collect baseline data for Watauga County on percent overweight adolescents between ages 10 and 19.

Physical Fitness

Activities:

- Develop a local fitness council.

Substance Abuse

Activities:

- Develop local alcohol and drug council for Watauga County.
- Coordinate with Project Assist in smoking cessation activities.

New Hanover County Year 2000 Task Force

Chair: Kevin C. Krisher

Start-up Date: July, 1992

Committees:

Maternal and Infant Health

Activities:

- Educational video production.

Substance Abuse

Activities:

- Development of a Resource Database.
- Expansion of prevention staff.
- Survey of advertising that promotes substance abuse.

Sexually Transmitted Diseases

Activities:

- Compilation of a resource guide.

Chowan Healthy Carolinians 2000 Task Force

P.O. Box 189

Elizabeth City, N.C. 27907-0189

Chair: Howard Campbell (919) 338-2167

Start-up date: June 1992

Committees:

Chronic Disease

Targets:

- Initiate comprehensive wellness program for Chowan Hospital, county, and town personnel, reaching at least 80% of the target population.
- Reduce smoking incidence between the ages of 12 and 20 by 10%.
- Provide health screenings and wellness seminars to at least 25% of local churches.
- Implement quarterly health screenings and wellness workshops for local housing projects, reaching at least 80% of the population.

Activities:

- Provide smoking cessation information to all maternity patients.
- Focus on worksite wellness programs.
- Disseminate educational materials at annual events such as county fairs.
- Provide community health seminars in churches.

Maternal and Child Health

Targets:

- Decrease by 5% low weight births.
- Decrease by 10% pregnancies among girls less than age 18.
- Decrease by 8% the number of maternal smokers.

Activities:

- Provide smoking cessation information to all maternity patients.
- Disseminate educational materials at annual events such as county fairs.
- Provide community health seminars in churches.

Sexually Transmitted Diseases

Targets:

- Reduce the number of persons infected with syphilis by 10%.
- Reduce by 30% the proportion of youth ages 15-24 who contract STDs.
- Increase by 10% the number of persons in high risk groups who are screened for HIV infection.
- Disseminate educational materials at annual events such as county fairs.
- Provide community health seminars in churches.

Healthy Stanly Countians 2000 Task Force

945 N. Fifth Street

Albemarle, N.C. 27907-0189

Chair: J. B. Bass, Jr. (704) 982-9171

Start-up date: October 1992

Committees:

Sexually Transmitted Disease

Activities:

- Inventory existing educational activities relating to STDs currently being taught to students in Stanly County.
- Provide classroom education on the prevention and etiology of syphilis and gonorrhea to all 9th graders.
- Offer educational programs to be conducted by health educators regarding STDs to parent-teacher organizations of each high school.
- Offer health education programs to all minority churches in Stanly County, focusing on the prevention and etiology of gonorrhea.
- Conduct educational programs at community centers of all public housing projects in Albemarle.

Maternal and Child Health

Activities:

- Expand community education regarding the causes of infant death.
- Provide adequate prenatal services for all pregnant women.
- Assure access to care for all infants through contacts with all related agencies who provide care.
- Expand WIC program to serve all eligible clients.
- Expand availability of parenting education, including content on safety, discipline, stress reduction, and child development.
- Encourage employers to support preconception and prenatal services.
- Develop an inventory of present resources available within the county and coordinate those resources.
- Solicit private and public resources to improve media campaigns to reach women during preconception and first trimester periods, and to provide incentives for early care.

Nutrition

Activities:

- Develop a test to evaluate the nutrition knowledge of 4th graders.
- Administer nutrition test to all 4th grade students in Albemarle City and Stanly County school systems and test again at end of school year.
- Provide on-going educational sessions to 4th grade elementary school students.

Appendix C

Non-certified Local Healthy Carolinians Task Forces

The following task force information is based upon a survey of goals and activities conducted in July 1994. As with any survey, the data received vary in the amount of detail. A contact person is provided so that the individual task forces can answer questions. There are other task forces in the state that may not have responded to this survey. For more information on the status of county Healthy Carolinians 2000 activities, contact Sarah Ahmad at the Healthy Carolinians 2000 Office, (919) 715-4173.

Wake County Healthy Carolinians 2000 Task Force

Wake County Office Building, Suite 1100

P.O. Box 550

Raleigh, N.C. 27602

Chair: Vernon Malone (919) 856-6160

Start-up date: March, 1994

Committees:

Chronic Disease

HIV/AIDS

Violence and other Injuries

Since this is a new task force, they have not yet set specific measurable goals. Instead, they set their mission statement.

Mission Statement: The mission of the task force is to promote the health of minorities in Wake County by encouraging human service agencies to enhance and expand their program services through better agency/ community collaboration and coordination.

Person County Healthy Carolinians 2000 Task Force

615 Ridge Road
Roxboro, N.C. 27573

Chair: Jim Graham (910) 599-6852

Startup date: Spring 1993

At this time, Person County's task force has not developed committees or set objectives.

Richmond County Healthy Carolinians 2000 Task Force

P.O. Box 429
Rockingham, N.C. 28379

Chair: Tommy Jarrell (910) 997-8300

Startup date: April 1994

Committees:

Long Term Care

Teen Pregnancy

Nutrition/Chronic Diseases

Objectives have not yet been selected for the individual committees and areas of interest.

Wilkes County Healthy Carolinians

Wilkes Regional Health System-WRMC

P.O. Box 609

North Wilkesboro, N.C. 28659

Chair: Judy West (910) 667-7625

Start-up Date:

Committees:

Infant Mortality

Targets:

- Reduce total infant mortality rate by 30%.
- Reduce pregnancies among girls age 15-17 to no more than 40.0 per 1,000 adolescents.
- Reduce pregnancies among girls age 10-14 to no more than 5 per 1,000 adolescents.
- Reduce low birth weight to an incidence of no more than 5% of live births.

Activities:

- Examine all programs in place in Wilkes County to determine what resources are available and what caused the decline in infant mortality currently experienced.
- Review all fetal and infant deaths in Wilkes County over the past 5 years to determine factors associated.
- Increase access to pregnancy prevention services and expand hours of services available to teens.
- Increase community education on contributory factors to low birth weight babies, and fetal and infant deaths.
- Examine resources available in community for family life education, teen pregnancy prevention, parenting classes, and other related services.
- Work with Smart Start committee to encourage employers to support preconception and prenatal services, parenting classes, and day care support.
- Work with Substance Abuse Task Force in efforts to reduce smoking and other substance abuse by pregnant women.
- Establish an active coalition for Healthy Mothers/Healthy babies to increase community awareness and involvement in infant mortality/morbidity reduction.

Chronic Disease

Targets:

- Decrease the prevalence of preventable primary risk factors and severity of controllable risk factors for heart disease, stroke, and chronic lung disease by 5% over the next six years. Preventable factors include cigarette smoking, obesity, and sedentary lifestyle. Controllable risk factors include high cholesterol and hypertension.
- Increase the rate of screening mammograms and Pap smears within the recommended guidelines by 25% over the next six years.

Wilkes County (Cont.)

Activities:

- Evaluate all resources within the community that are currently involved in affecting the chronic disease issue.
- Advise and assist five of the largest employers in Wilkes County to survey the chronic disease risk factor status of their employees and initiate or expand screening, wellness, and educational campaigns that will promote healthy lifestyles.
- Assist the same industries' employees in obtaining local primary care providers so that identified chronic disease risk factors can be followed and treated, and examination-based health screening such as Pap smears can be performed as part of regular health maintenance evaluations.
- Form a coalition core group from the Chronic Disease Subcommittee to work with the Southern Appalachian Leadership Initiative on Cancer (SALIC).
- Involve community organizations, minority groups, schools, media, etc. to assist with public education.
- Provide educational materials appropriate to the targeted populations.

Substance Abuse

Targets:

- The number of students in grades 6-9 who smoke regularly (2 or more cigarettes per day) will be reduced by 25%, as measured by a self-report survey.
- The number of male students in grades 6-9 who use smokeless tobacco products will be reduced by 50%, as measured by a self-report survey.
- The number of students in grades 6-9 who have used illegal drugs within the past month will be reduced by 50%, as measured by a self-report survey.
- The number of students in grades 6-9 who have consumed alcohol within the past month will be reduced by 50%, as measured by a self-report survey.
- The number of pregnant women who smoke, drink alcohol, or use illegal drugs during pregnancy will be reduced by 50%, as measured by self-report surveys and prenatal doctor examinations.

Activities:

- Develop student surveys.
- Obtain administrative support for the surveys.
- Conduct meeting/training sessions with health teachers, grades 6-9.
- Administer surveys and analyze data.
- Correlate data with prevention/intervention curriculum in schools.
- Publicize results to media, parents, students, and law enforcement.
- Solicit support from law enforcement for monitoring and enforcement of existing restrictions on sale of alcohol and tobacco products to minors.
- Continue to support drug-free/tobacco-free schools and work places.
- Continue to support Wilkes County's smoking control rules.
- Provide self-help materials and appropriate resource services in participating agencies.
- Support Project Assist and prenatal substance abuse program in providing smoking cessation and prevention education to pregnant women.

Ashe County Healthy Carolinians

P.O. Box 8
200 Hospital Drive
Jefferson, N.C. 28640

Chair: Nancy Kautz, RN (910) 246-5764

Start-up Date: August 1994

Committees:

Chronic Disease

Maternal and Child Health

Nutrition

Committee chairs have been selected, but individual objectives have not been created.

Surry County Healthy Carolinians 2000 Task Force

P.O. Box 1062
Dobson, N.C. 27017

Chair: Yvonne Hunsucker (910) 386-9400

Start-up Date: January, 1993

Committees:

Substance Abuse

Targets

- To increase the level of fitness in Surry County residents of all ages.

Activities

- Develop and distribute a calendar with healthy behaviors listed.
- Formulate feasible physical fitness tests for county schools.
- Develop and distribute a physical fitness brochure.

Physical Fitness

Targets

- To reduce the use of tobacco and the inappropriate use of alcohol and other drugs.

Activities

- Develop and distribute a youth help card.
- Develop and distribute a substance abuse brochure.
- Conduct a random sample survey about drug use for 11th and 12th graders.
- Distribute a book entitled Growing Up Drug Free during kindergarten registration and other parent/teacher conferences.



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Columbus County Healthy Carolinians 2000 Task Force

P.O. Box 810

Whiteville, N.C. 28472

Chair: William Clark (910) 642-5700 extension 457

Co-chair: Patricia Ray

Start-up date: October 5, 1993

Committees:**Sexually Transmitted Diseases****Injury Control****Target:**

- Increase seat belt and car seat usage.

Activities:

- Conduct public information campaigns and establish networks between existing community-based traffic injury prevention programs such as Students Against Drunk Driving (SADD), Drug Abuse Resistance Education (DARE), the local drug coalition, local car seat loan program, the American Association of Retired Persons (AARP), 55 Alive Program, and other similar associations.
- Survey people in the community to find the best strategies for education among specific communities.

Immunizations**Targets:**

- Increase immunization levels, especially among younger children, persons at risk, and older adults.

Activities:

- Launch intensive immunization awareness campaign using billboards, posters, flyers, paycheck inserts, church bulletin inserts, daycare mailings, local hospital discharge packets for new mothers, flyers to parents in Head Start and local kindergartens.
- Provide immunizations at local health fairs throughout the year.
- Increase hours and sites for immunizations by health department.
- Give incentives such as tee shirts, coupons for food, theater tickets, stickers, coloring books, pencils, and snapshots.
- Bulletin Boards at health department.
- PSAs on local radio and cablevision.

Substance Abuse**Activities:**

- See Injury Control.

Maternal and Infant Health**Activities:**

- See Immunizations.

Department of Environment, Health, and Natural Resources
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